

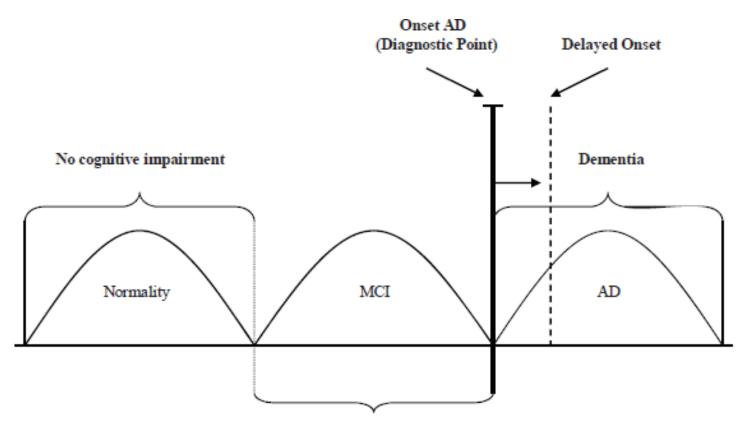
# MILD COGNITIVE IMPAIRMENT (MCI)

Yogesh Shah, MD, MPH
Director, Palliative Care Services
Broadlawns Memory Center
yshah@broadlawns.org

#### Yogesh Shah MD, MPH Director, Palliative Care Services Geriatric Medicine and Memory Center



1801 Hickman Road Des Moines, IA 50314 (515) 282-5700 office



Cognitive impairment, no dementia

#### Mild NCD-MCI-DSM 5

 There is evidence of modest cognitive decline from a previous level of performance in one or more of the domains

 The cognitive deficits are insufficient to interfere with independence

- You have problems with memory or another mental function. You may have problems with your memory, planning, following instructions or making decisions. Your own impressions should be corroborated by someone close to you.
- You've declined over time. A careful medical history reveals that your ability has declined from a higher level. This change ideally is confirmed by a family member or a close friend.

- Your overall mental function and daily activities aren't affected. Your medical history shows that your overall abilities and daily activities generally aren't impaired, although specific symptoms may cause worry and inconvenience.
- Mental status testing shows a mild level of impairment for your age and education level. Doctors often assess mental performance with a brief test such as the Mini-Mental State Examination (MMSE). More-detailed neuropsychological testing may shed additional light on the degree of memory impairment, which types of memory are most affected and whether other mental skills also are impaired.
- Your diagnosis isn't dementia. The problems that you
  describe and that your doctor documents through corroborating
  reports, your medical history or mental status testing aren't
  severe enough to be diagnosed as Alzheimer's disease or
  another type of dementia.

#### MCI

- You forget things more often.
- You forget important events such as appointments or social engagements.
- You feel increasingly overwhelmed by making decisions, planning steps to accomplish a task or interpreting instructions.

## MCI (con.)

- You start to have trouble finding your way around familiar environments.
- You become more impulsive or show increasingly poor judgment.
- Your family and friends notice any of these changes.

•15 to 40% of patients with MCI can revert to normal cognitive state with life style modification.

—Save Your Brain

 MCI may increase your risk of later progressing to dementia 12% per year.

## Benefits of having AD

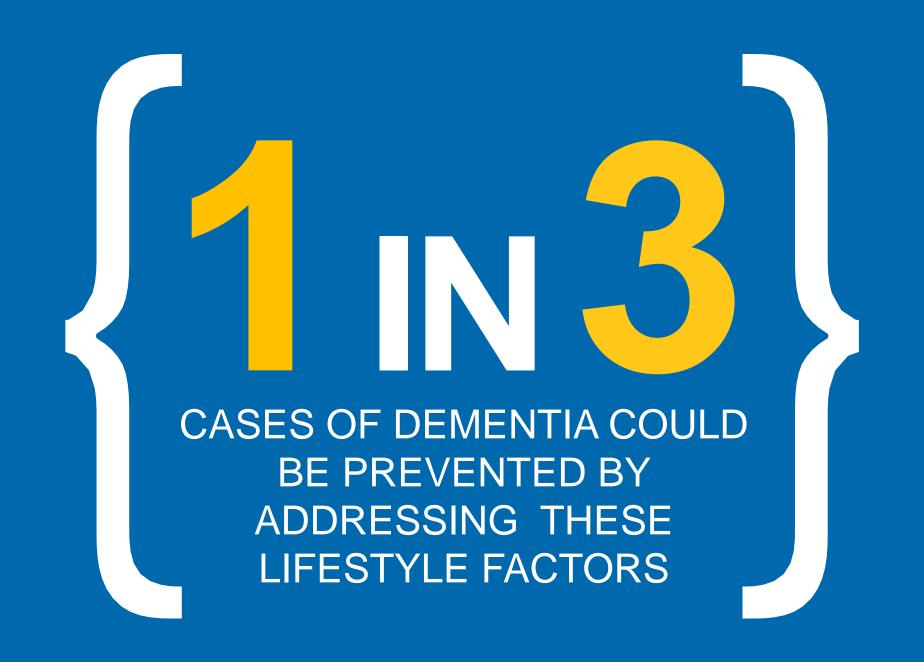
- You never have to watch 'reruns' on TV
- You are always meeting 'new' people
- You don't have to 'remember' whines of your spouse
- You can 'hide' your own Easter eggs

## RISK FACTORS FOR AD

- 1. Life style
- 2. Chronic unmanaged medical conditions
- 3. Medications

### Risk Factors - Established

- Family history
- Down's Syndrome
- APOE-E4 (whites)
- A. fibrillation



## DEMENTIA

#### **RISK REDUCTION**

35% of dementia risk factors are potentially modifiable.
These include:



Mid-life hearing loss - 9%



Failing to complete secondary education - 8%



Smoking - 5%



Failing to seek early treatment for depression - 4%



Physical inactivity - 3%



Social isolation - 2%



High blood pressure - 2%



**Obesity - 1%** 



Type 2 Diabetes - 1%

# Life- long risk reduction could cut dementia by a third

- Mid-life hearing loss responsible for 9% of the risk
- Failing to complete secondary education 8%
- Smoking 5%
- Failing to seek early treatment for depression 4%
- Physical inactivity 3%
- Social isolation 2%
- High blood pressure 2%
- Obesity 1%
- Type 2 diabetes 1%

## Early dementia check

### Do you have recent:

- Lost of sense of smell
- Balance issue
- Driving difficulty
- Trouble hearing

# ACETYL CHOLINE (ACH) IS REQUIRED FOR MEMORY

#### Neurotransmitters

- Acetylcholine (Ach)
- Serotonin (5 HT)
- Glutamate

# ANTICHOLINERGIC MEDICATIONS ARE BAD NEWS FOR MEMORY

# REMOVE OFFENDING ANTICHOLINERGIC AGENTS

## Popular OTC -anticholinergic

- Advil PM (pain and sleep)
- Benadryl (for allergies)
- Dramamine (for motion sickness)
- Excedrin PM (for pain and insomnia)
- Pepcid AC (acid reflux)
- Sominex (for insomnia)
- Tagamet (acid reflux)
- Tylenol PM (for pain and insomnia)

#### The most common anticholinergic classes

- tricyclic antidepressants
- first-generation antihistamines
- bladder antimuscarinics

## The most common drugs

# doxepin chlorpheniramine oxybutynin

http://www.pharmacytimes.com/contributor/timothy-o-shea/2015/02/frequently-prescribed-medications-linked-to-increased-dementia-risk

## Drugs That May Cause Memory Loss

- Antianxiety drugs
- Narcotic painkillers
- Sleeping aids
- Incontinence drugs
- **Antihistamines**
- Cholesterol drugs
- Antidepressant drugs

TCA

#### TABLE: DRUGS WITH MODERATE TO STRONG ANTICHOLINERGIC EFFECTS

TABLE. DIGGS WITH MODERATE TO STRONG ANTICHOLINERGIC EFFECTS		
	Tricyclic Antidepressants	Antipsychotics
	Amitriptyline (Elavil)	Chlorpromazine (Thorazine)
	Amoxapine (Asendin)	Clozapine(Clozaril)
	Clomipramine (Anafranil)	Olanzapine (Zyprexa)
	Desipramine (Norpramin)	Quetiapine (Seroquel)
	Doxepin (Sinequan)	Thioridazine (Mellaril)
	Imipramine (Tofranil)	Trifluoperazine (Stelazine)
	Nortriptyline (Aventyl)	
	Protriptyline (Vivactil)	Antispasmodics
	Trimipramine (Surmontil)	Atropine (Donnatal)
		Dicyclomine (Bentyl)
	Antiemetics	Clidinium (Quarzan)
	Cyclizine (Marezine)	Darifenacin (Enablex)
	Dimenhydrinate (Dramamine)	Fesoterodine (Toviaz)
	Meclizine (Antivert)	Flavoxate (Urizpas)
	Prochlorperazine (Compazine)	Glycopyrrolate (Robinul)
	Scopolamine (Transderm Scop)	Hyoscyamine (Anaspaz)
		Methscopolamine (Pamine)
	Antihistamines	Oxybutynin (Ditropan)
	Azatadine (Optimine)	Propantheline (Pro-Banthine)
	Azelastine (Astelin)	Solifenacin (Vesicare)
	Brompheniramine (Dimetapp)	Tolterodine (Detrol)
	Chlorpheniramine (Chlor-Trimeton)	Trospium (Sanctura)
	Clemastine (Tavist)	
	Dexchlorpheniramine (Polaramine)	Miscellaneous
	Hydroxyzine (Atarax)	Cyclobenzaprine (Flexaril)
	Triprolidine (Actidil)	Disopyramide (Norpace)
		Methocarbamol (Robaxin)
	Anti-Parkinson Drugs	Orphenadrine (Norflex)
	Benztropine (Cogentin)	
	Biperiden (Akineton)	
	Procyclidine (Kemadrin)	
	Trihexyphenidyl (Artane)	

## **Drugs**

 Regularly review medications and supplements

Manage medications that could affect cognition

Do frequent medication reconciliation

## BRAIN WELLNESS





# DEMENTIA RISK REDUCTION



YOU CAN REDUCE YOUR RISK OF DEMENTIA BY UP TO

70%

Take a quiz to find out what you can do to reduce your risk of dementia

idph.iowa.gov/Save-Your-Brain

#### SAVE YOUR BRAIN PRESERVE YOUR MEMORY AND THINKING SKILLS

#### **EAT WELL**



like blueberries & strawberries



Leafy greens - like spinach & kale



Fish - especially salmon & fresh tuna

#### **GET MOVING**



Aerobic exercise



Resistance training



**Balance** and flexibility fraining

#### **STAY SHARP**



Read a Book = & discuss with others



Learn something new like an instrument or language

#### **BESOCIAL**



